

Docket No. 2527-1A1

OS-1005

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF APPEALS

APPEAL BRIEF

In re Application of:

MARIO TENUTA

Serial No. 10/017,328

Art Unit: 1651

Filed: October 25, 2002

Examiner: David M. Naff

Title: METHOD FOR THE TREATMENT OF A SOIL  
CONTAINING SOILBORNE PATHOGENS

\* \* \* \* \*

May 6, 2005

Commissioner for Patents  
Alexandria, VA 22313-1450

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SIR:

On March 4, 2005, Applicant appealed from the Final Rejection of Claims 2 and 5.

A copy of Claims 2 and 5 are appended hereto as Appendix A.

Applicant is enclosing the requisite fee as required under 34 U.S.C. 134  
and 35 U.S.C. 41 in the amount of \$250.00.

REAL PARTY IN INTEREST

The real parties in interest are the Government of Canada and Fats and Proteins  
Research Foundation Inc.

#### RELATED APPEALS AND INTERFERENCES

A related Appeal was filed in Application S.N. 09/624,098 which was the parent application. An Appeal was filed on September 16, 2004 and an Appeal Brief filed on November 3, 2004. The final rejection was subsequently withdrawn by the Examiner.

#### STAT US OF CLAIMS

Claims 2 and 5 remain in the case and are being appealed.

#### STATUS OF AMENDMENTS

No amendment has been filed subsequent to the final rejection dated December 28, 2004.

#### SUMMARY OF CLAIMED SUBJECT MATTER

Claim 2 defines a method of controlling soilborne pathogens in a soil which has an organic carbon content less than 1.7% by weight. The method comprises the step of generating ammonia in the soil which is done by adding a nitrogen containing material and a pH raising agent to raise the soil pH above 8.5. This then generates ammonia to control the soilborne pathogens.

Reference may be had to the paragraph commencing on line 15 of page 9 to page 10, line 15 which shows the experimentation determining that ammonia only accumulated to toxic levels in soils with an organic content larger than 1.7%. Figure 11 shows the peak concentration of ammonia in soils versus the organic carbon content.

## GROUNDS OF REJECTION

To be reviewed on Appeal are Claims 2 and 5 which stand rejected under 35 USC 103 (a) as being unpatentable over Blodgett et al in view of Cooley (6,300,282 B1) and Schisler et al (5,783,411), and if necessary in further view of Menzies et al.

The rejection relies on Blodgett et al for disclosing that the pH of a soil may be raised so that the potato scab is reduced. Cooley teaches the use of nitrogen and the Examiner has alleged that it would be obvious to add the ammonium nitrate to the limed soil of Blodgett et al.

## ARGUMENT

### Claims 2 and 5.

In the Office Action, the claims were rejected under 35 USC 103 (a) as allegedly being unpatentable over the newly cited reference of Blodgett et al in view of Cooley, Schisler et al, and Manzies et al. The Examiner has stated that Blodgett et al discloses increasing the pH of soil to overcome potato scab. The secondary reference of Cooley is utilized to show that the application of a nitrogen containing compound will increase potato yield.

The Examiner has further stated that the soil of Blodgett et al was a sandy loam soil and would inherently contain less than 1.7% carbon content. It is respectfully submitted that this statement cannot be supported. The Examiner has commented that with respect to Schisler et al there is disclosed a sandy clay loam soil which has an organic matter content of 1.3. However, one cannot read such limitation into Blodgett et al. Blodgett et al does not disclose that his soil has a carbon content of below 1.7% and there is nothing within the four corners of this reference which would lead one to be able

to state that such was the case. Sandy loam soils can have a carbon content greater than 1.7%.

The secondary reference of Cooley does teach the application of nitrogen to a soil. However, there is nothing within the four corners of this reference which would suggest that the application of nitrogen, in combination with other ingredients would lead to a method for controlling soilborne pathogens by generating ammonia in the soil and which ammonia is effective to control the soilborne pathogens.

It has been established in the jurisprudence that the Examiner may not resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. It is believed that the following jurisprudence is pertinent to the issues under consideration herein. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968).

It is furthermore respectfully submitted that the evidence adduced by the Examiner is insufficient to establish a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. See In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is prima facie obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the

references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on 35 USC 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art.

It is not seen where any of the references discloses a method for controlling soilborne pathogens by generating ammonia in the soil. Furthermore, it is not believed that there is anything within the references that would lead one to combine their teachings as suggested by the Examiner.

As for the proposed combination of references, it is respectfully submitted that since none of the references in the combination teaches the distinctive features of Applicant's invention as defined now in the amended Claim 2, any hypothetical construction produced by this combination would not lead to Applicant's invention.

There is nothing in the cited art to suggest what Applicant did. In fact, these references do not even contain any suggestion that they could be combined in the manner proposed by the Examiner. However, this is a prerequisite for a combination rejection, as stated by the Patent Office Board of Appeals in its decision in *Ex parte Walker*, 135 USPQ 195:

*"In order to justify combination of references it is necessary not only that it be physically possible to combine them, but that the art should contain something to suggest the desirability of doing so."*

The Court of Customs and Patent Appeals subscribed to the Board's reasoning, when it handed down its decision in the case *In re Imperato*, 179 USPQ 730, holding:

*"The fact that the disclosures of references can be combined does not make combination obvious unless the art also contains something to suggest the desirability of such a combination."*

*"With regard to the principal rejection, we agree that combining the teaching of Schaefer with that of Johnson or Amberg would give the beneficial result observed by appellant. However, the mere fact that those disclosures can be combined does not make the combination obvious unless the art also contains something to suggest the desirability of the combination. In re Bergel, 48 CCPA 1102, 292 F.2d 955, 130 USPQ 206 (1961). We find no such suggestion in these references."*

In fact the art must not only be combinable in accordance with the principles of the above decisions, but to support a valid combination rejection the art must also suggest that the combination would accomplish Applicant's results. This was stated by the Patent Office Board of Appeals in the case *Ex parte Tanaka, Marushima and Takahashi* (174 USPQ 38), as follows:

*"Claims are not rejected on the ground that it would be obvious to one of ordinary skill in the art to rewire prior art devices in order to accomplish Applicant's result, since there is no suggestion in prior art that such a result could be accomplished by so modifying prior art devices."*

It is also well settled that an inventive combination cannot be anticipated by finding individual features separately in the prior art and combining them in a piecemeal manner to show obviousness. Note should be taken in this connection of the decision of the Court of Customs and Patent Appeals *In re Kamm and Young*, 17 USPQ 298 ff, which appears most pertinent to the issues at hand and wherein the claims were also rejected over a combination of references. The Court held that:

*"The rejection here runs afoul of a basic mandate inherent in section 103 - that 'a piecemeal reconstruction of the prior art patents in the light of appellants' disclosure' shall not be the basis for a holding of obviousness. In re Rothermel, 47 CCPA 866, 870, 276 F.2d 393, 396, 125 USPQ 328, 331 (1960). 'It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.' In re Wesslau, 53 CCPA 746, 750, 353 F.2d 238, 241, 147 USPQ 391, 393 (1965)." Emphasis added.*

It is again respectfully pointed out that the claim calls for controlling soilborne pathogens in a soil having an organic carbon content less than 1.7 by weight which comprises the step of generating ammonia in the soil. None of the references cited by the Examiner even begin to suggest one can generate ammonia in the soil to control the soilborne pathogens. That being the case, it cannot be understood how it would be obvious to take different steps from different patents and allege obviousness. There is no suggestion in any of the patents of the step called for in Claim 1.

Respectfully,



Eric Fincham,  
Reg. No. 28,201

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Alexandria, VA 22313-1450 on May 9, 2005

Express Mail ER 422071906 US

  
Eric Fincham

## APPENDIX A

2. A method of controlling soilborne pathogens in a soil having an organic carbon content less than 1.7% by weight, comprising the step of generating ammonia in said soil, said step of generating ammonia comprising adding a nitrogen containing material and a pH raising agent to said soil to raise soil pH above 8.5 to thereby generate said ammonia to control said soilborne pathogens.

5. The method of Claim 2 wherein said pH raising agent is selected from the group consisting of calcium hydroxide, calcium oxide, sodium hydroxide, and potassium hydroxide.